

CLAIMS:

1. In an optical recording apparatus for writing information on an optical recording medium by a radiation beam, a method for setting an optimum value of a write parameter, comprising  
a first step of writing a series of test patterns on the recording medium, each pattern with a  
5 different value of the write parameter,  
a second step of reading the patterns to form corresponding read signal portions,  
a third step of deriving a value of a read parameter from each read signal portion, the values forming a function of the read parameter versus the write parameter, and  
a fourth step of selecting the optimum value of the write parameter in dependence on a preset  
10 value of a derivative of the function,  
characterized in that the fourth step includes reading the preset value from the medium.
2. The method according to Claim 1, wherein the derivative is a normalised derivative determined by multiplying the derivative of the function with respect to the write parameter and then multiplying by a ratio of the read parameter and the write parameter.
- 15 3. The method according to Claim 1 or 2, wherein the fourth step includes the sub-steps of determining a derivative of the function and determining the intersection of the derivative with the preset level.
4. The method according to Claim 1, wherein the third step includes the step of curve-fitting the values of the read parameter and the write parameter to the function  
20 defining a relation between the read parameter and the write parameter.
5. The method according to Claim 1, wherein the recording parameter is a value of a write power level of the radiation beam.
6. The method according to Claim 1, wherein the read parameter is a modulation of the amplitude of a read signal derived from information recorded on the  
25 medium.
7. An apparatus for writing information on an optical recording medium, comprising a radiation source for emitting a radiation beam in dependence on a controllable value of a write parameter for writing information on the medium, a control unit for writing a series of test patterns, each pattern with a different value of the write parameter, a read

- unit for reading the patterns and forming corresponding read signals, a first processor for deriving a value of a read parameter from each read signal, the values forming a function of the read parameter versus the write parameter, a second processor operatively connected for deriving an optimum value of the write parameter in dependence on a preset value of a
- 5 derivative of the function, characterized in that the apparatus comprises a read unit for reading the preset value from the medium, and in that an output of the read unit is connected to the second processor for transmitting the preset value.
8. The apparatus according to Claim 7, wherein the second processor is operatively connected for deriving a derivative of the function and for determining the
- 10 intersection of the derivative and the preset value.
9. The apparatus according to Claim 7, wherein the derivative is a normalised derivative formed by multiplying the derivative by the write parameter over the read parameter.
10. The apparatus according to Claim 7, wherein the write parameter is a
- 15 write power level of the radiation beam.
11. The apparatus according to Claim 7, wherein the read parameter is an amplitude of a read signal.